AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawing includes changes to FIG. 5. Specifically, FIG. 5 has been amended to show a box labeled "A" indicating the flow returns to step S23, consistent with the original specification.

Attachments: One Replacement Sheet for FIG. 5

REMARKS

I. Status of the claims

By this Amendment, Applicant has amended claims 1, 4, and 5 to more appropriately define the invention. Applicant has cancelled claims 2-3 and 6-8 without prejudice or disclaimer of the subject matter thereof. The Amendments to the claims are supported by, at least, the recitations in original claims 2-3 and 6-8. The Amendments to the claims are also supported by the specification. For example, the amendment to claim 1 is supported by the description in the specification from page 14, line 20 to page 15, line 7; the amendment to claim 4 is supported by the description in the specification on page 15, lines 17 to 23. The amendment to claim 5 is similar to that of claim 1, and is therefore also supported by the same portion of specification. Upon entry of this Reply, claims 1, 4, and 5 remain pending and under current examination.

II. Regarding the Amendment to FIG. 5

In response to the objection, Applicant has amended FIG. 5 to correct an informality, by adding a box labeled "A" to indicate that after step S29, the flow returns to step S23, consistent with the original specification. For instance, the specification on page 12, lines 21 to 27, and on page 14, lines 2 to 12 , supports this amendment.

III. Regarding the non-final Office Action

In the Office Action, the Examiner objected to FIG. 5 as failing to comply with 37 CFR 1.84(p)(5); rejected claims 1, 4, 7, and 8 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,574,796 to *Roeck, et al.* ("*Roeck*"); rejected claims 2, 3, 5, and 6 as being unpatentable over *Roeck* in view of U.S. Patent No. 6,081,533 to

Laubach et al. ("*Laubach*"). Applicant respectfully traverses the objection and rejections for the following reasons.

IV.   Regarding the objection to the drawings

The Examiner objected to FIG. 5 for the reason that S29 in FIG. 5 is not mentioned in the specification. In response, Applicant has amended the specification to add an explicit reference to step S29 in the description of FIG. 5 at page 14. The amended specification is in compliance with 37 CFR 1.121(b). Upon entry of this Amendment, the drawings will be fully compliant with 37 CFR 1.84(p)(5). Therefore, Applicant respectfully requests that the objection to the drawings under 37 CFR 1.84(p)(5) be withdrawn.

V.   Regarding the rejection of claims 1, 4, 7, and 8 under 35 U.S.C. § 102(e)

The rejection of claims 7 and 8 under 35 U.S.C. § 102(e) has been rendered moot by Applicant's cancellation of those claims.

Applicant traverses the rejection of claims 1 and 4 under U.S.C. § 102(e) because *Roeck* does not teach each and every element of the claims. In order to properly anticipate Applicant's claimed invention under 35 U.S.C. § 102(e), each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Further, "[t]he identical invention must be shown in as complete detail as is contained in the...claim." See M.P.E.P. § 2131 (8th Ed., Aug. 2001), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." M.P.E.P. § 2131 (8th Ed. 2001), p. 2100-69.

Roeck discloses detecting or locating a viable data carrier in a downstream channel by a cable modem (Abstract). *Roeck* further discloses that a first downstream frequency that the modem checks is the most recently used frequency, stored in cache memory by a CPU (Col. 9, lines 53-56). *Roeck* discloses that alternatively, the cable modem may begin checking [frequency] at a smaller end of a down-stream band (Col. 9, lines 60-62). However, *Roeck* does not teach, at least, setting means configured to determine at predetermined intervals while sequentially searching a frequency data from a frequency table, whether or not frequency data in accordance with information saved in a cache area is matching the frequency of a data signal, as required by claim 1.

In the Office Action, the Examiner asserted that *Roeck* teaches "determining at predetermined intervals" (OA at 6). Applicant disagrees. *Roeck* discloses that when searching the list for the correct data carrier (i.e. list of frequencies), it can take up to 500 milliseconds to check each potential channel (Col. 4, line 67- Col. 5, line 2). However, *Roeck* does not teach or suggest, at least, setting means configured to determine at predetermined intervals while sequentially searching frequency data from a frequency table, whether or not frequency data in accordance with the information saved in a cache area is matching the frequency of a data signal, as required by claim 1.

For similar reasons, *Roeck* also does not teach or suggest, at least, setting means configured to sequentially search a cache area for frequency data matching the frequency of a data signal and determine during this sequentially searching at

predetermined intervals whether the frequency data stored in a frequency table is matching the frequency of the data signal, as required by independent claim 4.

Thus, *Roeck* does not anticipate claims 1 and 4. Accordingly, Applicant requests that the rejection of independent claims 1 and 4 under 35 U.S.C. § 102(e) be withdrawn, and the claims be allowed.

VI. Regarding the rejection of claims 2, 3, 5 and 6 under 35 U.S.C. § 103(a)

The rejection of claims 2-3 and 6 under 35 U.S.C. § 103(a) has therefore been rendered moot by Applicant's cancellation of those claims.

Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 5 because a *prima facie* case of obviousness has not been established with respect to claim 5.

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). M.P.E.P. § 2142, 8th Ed., Rev. 2 (May 2004), p. 2100-128.

A *prima facie* case of obviousness has not been established because, among other things, *Roeck* and *Laubach*, taken alone or in combination, fail to teach or suggest each and every element of Applicant's claims.

For the reasons discussed above, *Roeck* does not teach or suggest a method of setting a frequency applied to a cable modem apparatus, including a step of, during [the] sequentially selecting [frequency data from a frequency table], making a

determination at predetermined intervals whether frequency data saved in a cache area is matching the frequency of a data signal, as required by claim 5.

Laubach does not cure *Roeck*'s deficiencies. *Laubach* discloses a method for enhancing the functionalities of a subscriber terminal unit (STU) or ADSL terminal unit (ATU) through the use of different types of application interface modules (AIMs), by incorporating a slot in the STU/ATU through which a detachable AIM can be inserted and electrically coupled to the STU/ATU (Abstract). *Laubach* further teaches if all the frequencies in a preferred list have been tried and there are no matches, the STU performs a standard algorithmic seek process to find and acquire an available channel (Col. 14, lines 1-24). However, *Laubach* does not teach or suggest, "during [the] sequentially selecting [frequency data from a frequency table], making a determination at predetermined intervals whether frequency data saved in [a] cache area is matching the frequency of [a] data signal," as required by claim 5.

Moreover, a case of *prima facie* obviousness has not been established at least because the requisite motivation to combine *Roeck* and *Laubach* is lacking. Determinations of obviousness must be supported by evidence on the record. See *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (finding that the factual determinations central to the issue of patentability, including conclusions of obviousness by the Board, must be supported by "substantial evidence"). Further, the desire to combine references must be proven with "substantial evidence" that is a result of a "thorough and searching" factual inquiry. *In re Lee*, 277 F.3d 1338, 1343-1344 (Fed. Cir. 2002) (quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52).

In this case, the Office Action does not show, by substantial evidence, that a skilled artisan considering *Roeck* and *Laubach*, not having the benefit of Applicant's disclosure, would have been motivated to combine those references in a manner resulting in Applicant's claimed combination. The Examiner generally stated that one of ordinary skill in the art would have combined the references to have the modem search the frequency table if the matching frequency was not found in cache (OA, at 7). However, the Office Action has failed to show that either of the references suggests the desirability of the alleged combination. That is, although the references could be combined, the Office Action does not show that any of the references "suggests the desirability" of that combination. For these additional reasons, a case of *prima facie* obviousness has not been established with respect to claim 5.

Thus, a case of *prima facie* obviousness has not been established regarding claim 5. Accordingly, Applicant respectfully requests that the rejection of claim 5 under 35 U.S.C. § 103(a) be withdrawn, and the claim be allowed.

VII. Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

By: _____
Sherry X. Wu
Reg. No. 54,553

Dated: November 14, 2005

Attachment: **Replacement Drawing Sheet (1 page)**